## CRUISE REPORT

**VESSEL:** Townsend Cromwell, cruise 91-02 (TC-160)

CRUISE

**PERIOD:** February 25-March 21, 1991

AREA OF

**OPERATION:** Oahu and the Northwestern Hawaiian Islands (NWHI)

Fig. 1.

TYPE OF

**OPERATION:** Personnel from the Southwest Fisheries Science

Center (SWFSC) Honolulu Laboratory (HL) conducted a series of midwater trawls around Oahu, Necker

Island, Maro Reef, and Midway Island.

ITINERARY:

February 25 - Start of cruise. On board Theresa Martinelli, Frank A. Parrish, Gregory C. Spencer, and Happy

A. Williams. Departed Snug Harbor at 1200, Hawaiian standard time and conducted 3 trawls

heading south.

February 27 - Completed 6 trawls south and 3 trawls north of

Oahu. Proceeded to north Necker trawl stations.

March 1-2 - Completed 1 trawl north and 2 trawls south of

Necker Island. Proceeded to south Maro Reef stations. Two satellite drift buoys were deployed 15 nmi north and south of the 100-fm contour of the banks. Two puerulus collectors were anchored in 20 fm on the easternmost tip of

the bank.

March 3-5 - Completed 3 trawls north and 3 trawls south of

Maro Reef. Two satellite drift buoys were

deployed 15 nmi north and south of the banks 100-

fm contour of the banks.

March 6-9 - Completed 6 trawls north and 6 trawls south of

Midway Island. Proceeded to North Maro Reef

trawl stations.

- March 10-12 Completed 3 trawls north and 3 trawls south of Maro Reef. Proceeded to South Necker trawl stations.
- March 13-14 In transit to Necker trawl stations. Weather prevented trawls.
- March 15 Retrieved Puerulus collectors.
- March 16-18 In transit to Snug Harbor, Oahu to medivac crew members.
- March 19 Arrived Snug Harbor, Oahu. Disembarked Theresa Martinelli. Departed Snug Harbor and proceeded to north Oahu trawl stations.
- March 20 Weather prevented north Oahu trawling, proceeded to south Oahu and trawled 4 stations.
- March 21 Arrived at Snug Harbor 1600. End of cruise.

## MISSIONS AND RESULTS:

A. Conduct midwater trawl operations using Cobb trawl to collect lobster phyllosomes.

A total of 40 Cobb trawls of approximately two hours were conducted. A night and day tow was planned at 15, 61, and 110 nmi north and south of Oahu, Necker Island, Maro Reef, and the Midway Island 100-fm contour. Day trawls were conducted with the net set at roughly 80 m, and night trawls were conducted with the net doors just below the surface. Weather prevented 9 of the intended trawls at Necker Island and 3 off north Oahu.

- B. General observations and miscellaneous activities.
  - Bird flock, fish school, and marine mammal sightings were recorded by the ship's officers and crew during daylight hours when possible.
  - 2. Standard weather observations were made at 0000, 0600, 1200, and 1800 (G.m.t.) by the ship's officers and crew.
  - 3. XBT casts were made at 0000, 0600, 1200, and 1800 (G.m.t.) by the ship's officers and crew.

## SCIENTIFIC PERSONNEL:

Frank A. Parrish, Chief Scientist, National Marine Fisheries Service (NMFS) Southwest Fisheries Science Center (SWFSC), Honolulu Laboratory (HL).

Theresa Martinelli, Cooperating Scientist, University of Hawaii. Gregory C. Spencer, Research Assistant, NMFS, SWFSC, HL. Happy A. Williams, Research Assistant, NMFS, SWFSC, HL.

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Attachments

Tables

Figures